CardBus 10/100 Fast Ethernet PC Card

User Manual

Doc. No.: 052902-01

REGULATORY STATEMENTS

FCC Certification

The United States Federal Communication Commission (FCC) and the Canadian Department of Communications have established certain rules governing the use of modems and other electronic equipment.

FCC Part 15 Registration

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interface, and
- This device must accept any interface received, including interface that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.

TABLE OF CONTENTS

INTRODUCTION	• 1
System Requirements Operating Systems & Software Support	
INTRODUCTION TO CARDBUS	. 2
HARDWARE INSTALLATION	.4
Inserting the CardBus Dual-Speed PC Car	
Removing the CardBus Dual-Speed PC Ca	
Connecting to the Network LED Indicators	. 5
SOFTWARE INSTALLATION	.6
WINDOWS 95 INSTALLATION (OSR2) WINDOWS 98 INSTALLATION WINDOWS 2000 INSTALLATION WINDOW ME INSTALLATION WINDOWS XP INSTALLATION NOVELL NETWARE INSTALLATION	.7 10 13 14
SPECIFICATIONS	18
Network Interface Specifications: Host Interface: General Specification:	18

INTRODUCTION

System Requirements

- An IBM compatible notebook computer with 486 or faster processor with CardBus supported socket.
- Drivers and utilities provided with this product.
- PCMCIA PC Card compliant Card Services and Socket Services.
- 100Base-TX Fast Ethernet or 10BaseT Ethernet connectivity to your local area network.

Operating Systems & Software Support

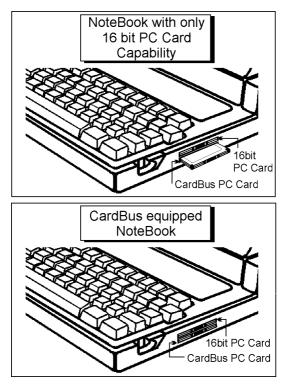
- Windows 95 (OSR 2.x), Windows 98/ME, Windows 2000, XP, NT 4.0
- DOS ODI client
- Linux OS
- FTP PC/TCP

INTRODUCTION TO CARDBUS

Cardbus is the next generation 32-bit version issued by PCMCIA PC Card standard. In addition to support a wider bus (32 bits instead of 16 bits), CardBus also supports bus mastering and operation speeds up to 33 MHz. The 132M Bytes bus transfer rate (compares with legacy 16-bit I/0 PC Card, 20MByte) provides the mobile user to enjoy the high-bandwidth network connection.

A Mobil computer, which equipped with CardBus and properly configured, is the fundamental requirement to use the CardBus 10/100M PC Card. To make sure about this point, please follow the guideline listed below:

Cardbus is designed to support both 16-bit and Cardbus Card. But the legacy 16-bit PC Card slot couldn't accept the CardBus PC Card. In order to prevent the wrong operation, CardBus is thus developed with particular mechanical consideration to prevent it fit into the legacy 16-bit PC Card Slot. If you can't insert the CardBus 10/100 PC Card into the slot firmly reaching the bottom, your notebook probably hasn't the capability to support CardBus technology. Please check your notebook manual for detail information.

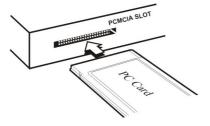


 Due to variant design of notebook computers, some models implement a setting in the Computer's BIOS to switch between Cardbus and 16-bit PC Card modes. You could consult the User's Guide of your notebook and properly set on the CardBus or Auto_Detect mode.

HARDWARE INSTALLATION

Inserting the CardBus Dual-Speed PC Card

- Hold the CardBus PC Card with wide connector toward the slot and the brand label facing upward.
- Insert the CardBus PC Card and push it firmly into the bottom. (Please see the following figure for reference)



Removing the CardBus Dual-Speed PC Card

It's quite different for various computer mechanical designs. Please refer to the PC Card removal instruction in the document for your notebook computer.

Connecting to the Network

Connect RJ-45 port of the CardBus 10/100 Ethernet PC Card Adapter to the Category 5 Network cable before loading any network driver.

- For operation in the 100Mbps (100Base-TX) Ethernet network, a Category 5 unshielded twisted pair (UTP) cable should be used to connect between the RJ-45 port and 100Mbps hub/switch.
- For operation in the 10Mbps (10Base-T) Ethernet network, Category 3 or 5 unshielded twisted pair (UTP) cable could be used to connect between the RJ-45 port and a 10Mbps hub or switch.

LED Indicators

- 1. **LINK 10** LED indicator: glows green when operated in the 10Mbps Ethernet network.
- 2. LINK 100 LED indicator: glows green when operated in the 100Mbps Ethernet network.
- ACT LED indicator: blinks orange when the CardBus 10/100 Ethernet Attached Port PC Card Adapter is transmitting/receiving data.

SOFTWARE INSTALLATION

Windows 95 Installation (OSR2)

- Boot up computer to Windows 95. Make sure the CardBus 10/100 Fast Ethernet PC Card is well connected to the CardBus Socket.
- 2. Click Next in the Update Device Driver Wizard Windows.
- 3. Click **Others Locations** to select an installation driver manually.

Update Device Driver \	/izard
	Windows was unable to locate a driver for this device. If you do not want to install a driver now, click Finish. To search for a driver manually, click Other Locations. Or, to begin the automatic search again, click Back.
	Other Locations
	< <u>B</u> ack Finish Cancel

4. Insert the installation disk or CD into the chosen drive (a floppy drive or a CD-ROM drive). Click Browse to select the location where you load the device driver. Click OK to start the search. The driver will be installed automatically.

- 5. Insert the original Windows 95 CD/disks to reset the system as requested.
- For the first installation, please select Network in the Control Panel window to add Protocols, Client and Service if needed.
- 7. Restart the system to activate the card.

Windows 98 Installation

- Boot up computer to Windows 98. Make sure the CardBus 10/100 Fast Ethernet PC Card is well connected to the CardBus Socket.
- The system will automatically detect the card and ask for the device driver. Click Next to continue.



3. Select Search for the best driver for your device (Recommended) and click Next to continue.

Add New Hardware Wiza	ard
	What do you want Windows to do?
	< Back Next > Cancel

4. Insert the installation disk or CD into the chosen drive (a floppy drive or a CD-ROM drive) and select the location where you load the device driver. Click **Next** to start the search. The driver will be installed automatically.

Add New Hardware Wi	zard	
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.	
	Floppy disk drives	
	CD-ROM drive	
😪 👗	■ Microsoft Windows Update	
	Specify a location:	
	A:\	
	Browse	
	< Back Next > Cancel	

5. Click **Next** to continue when the suitable driver for the device selected.



 Insert the original Windows 98 CD/disks to reset the system as requested. Click OK to continue.

Insert Di	sk 🛛 🕅
8	Please insert the disk labeled 'Windows 98 Second Edition CD-ROM', and then click OK.
	ОК

7. Follow on-screen instruction to complete installation. Click **Finish**.



8. Click **Yes** to restart the system to activate the card.



Windows 2000 Installation

 When the CardBus 10/100 Fast Ethernet PC Card is well connected to the CardBus Socket, the system will automatically detect the card and ask for the necessary device driver. Click Next to continue.



2. Select Search for a suitable driver for my device (recommended) and click Next.



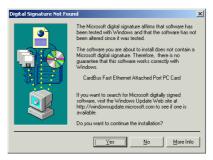
 Insert the installation disk or CD into the chosen drive (a floppy drive or a CD-ROM drive) and select the location where you load the device driver. Click Next to start the search.



4. Click **Next** to continue when the appropriate driver for the device is selected.

Found New Har	dware Wizard
	Search Results and has finished searching for driver files for your hardware device.
∂ Windows	Ethemet Controller
-	a \netcb103 inf
	< Back Cancel

5. Click Yes in the Digital Signature Not Found window to continue.



6. Click Finish to complete installation.



- 12 -

Window ME Installation

- Once the CardBus 10/100 Fast Ethernet PC Card is well connected to the CardBus Socket, Windows ME will automatically detect the card and ask for the device driver.
- 2. Select Automatic search for a better driver (Recommended) and click Next to continue.



 Insert the installation disk or CD into the chosen drive (a floppy drive or a CD-ROM drive) and select Removable Media (Floppy, CD-ROM...) and click Next.

Add New Hardware Wizard	
()	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. © Search (of the best driver for your device. (Recommended). ♥ Removel be identify (hoppy: CD-ROM_) ♥ Specity a jocation: ▶ ● Starb (of the drivers) in a specific location, so you can select the driveryou work.
	< Back Next > Cancel

- Click Next to continue when the appropriate driver for the device is selected.
- Windows Me will copy the appropriate driver to your system. Insert the original Windows ME CD/disks into the chosen drive to reset the system if Windows Me system requests you to do.
- 6. Click **Finish** to complete the installation.



Windows XP Installation

 Windows will detect automatically the new device which being well connected and prompt you to insert the network device driver. Select Install form a list or specific location (Advanced) to search the best installation driver. Click Next to continue.



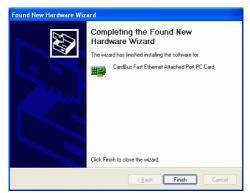
 Insert the installation disk or CD into the chosen drive (a floppy drive or a CD-ROM drive) and select the location where you load the device driver and Select Search for the removable media (floppy, CD-ROM...) and click Next to start the search.

Please choose your search and ins	tallation options.	ENT.
Search for the best driver in these	locations.	
Use the check boxes below to limi paths and removable media. The t		which includes local
Search removable media (fi	ppy, CD-ROM)	
Include this location in the s	earch:	
EN		Browse
O Don't search. I will choose the driv	er to install.	
Choose this option to select the de the driver you choose will be the b		does not guarantee t
	< Back Next	> Cancel

3. Windows will start searching for the appropriate installation driver. When the screen instruction appears as below, click **Continue Anyway** to proceed.



- Wait for seconds while Windows copies the appropriate driver to your system.
- 5. Click **Finish** to complete the installation.



Novell NetWare Installation

- 1. At the DOS prompt type **Start** under the path *NETWARE*.
- 2. The installation program will automatically proceed.
- Follow Novell's instructions on using ODI programs.
- 4. Enter **login** at the Netware login prompt, e.g. *f:login>*.
- 5. Type your user name and password.
- 6. The connection is made.

SPECIFICATIONS

Network Interface Specifications:

- 10Mbps Ethernet: IEEE 802.3 standard for 10BaseT baseband CSMA/CD local area network.
- 100Mbps Ethernet: IEEE 802.3u standard for 100Base-TX baseband CSMA/CD local area network.
- 20/200 Mbps full duplex support
- Autonegotiation between all four-operation modes.

Host Interface:

- Cardbus PC Card Standard compliant.
- Type II PC Card form factor

General Specification:

- LEDs: ACT, LINK10, LINK100
- Environments Ranges: Operating: 32°F to 140°F (0°C to 60°C) Storage: 68°F to 158°F (20°C to 70°C) Humidity: 10% - 95%, non-condensing
- Certifications: FCC Part 15, Class B. CE Mark (EN55022 / EN55024, Class B). VCCI Class B